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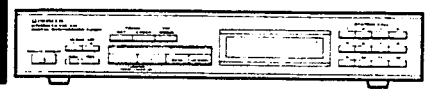
Service Manual



ORDER NO.
ARP 1686

FM/AM DIGITAL SYNTHESIZER TUNER

F-Z92L
F-Z92

MODEL F-Z92L AND F-Z92 HAVE FOUR VERSIONS:

Type	Applicable model		Power requirement	Export destination
	F-Z92L	F-Z92		
ZEB	O		DC power supply	European continent and United Kingdom
Z		O	DC power supply	General market
ZEZ		O	DC power supply	West Germany
ZIX1B		O	DC power supply	Italy

- **This manual is applicable to the F-Z92L/ZEB type.**
- **For the other types, refer to additional service manuals.**
- **The F-Z92L covers the MW/LW bands while the F-Z92 covers the MW only.**
- **Ce manuel pour le service comprend les explications en français de réglage.**
- **Este manual de servicio trata del método ajuste escrito en español.**

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST 2
2. SCHEMATIC DIAGRAM 6
3. P.C. BOARDS CONNECTION DIAGRAM 9
4. ELECTRICAL PARTS LIST 13
5. ADJUSTMENT 15
   RÉGLAGE 17
   AJUSTE 19
6. IC INFORMATION 18
7. PANEL FACILITIES 20
8. SPECIFICATIONS 21

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1. EXPLODED VIEWS, PACKING AND PARTS LIST

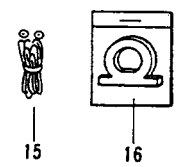
NOTES:

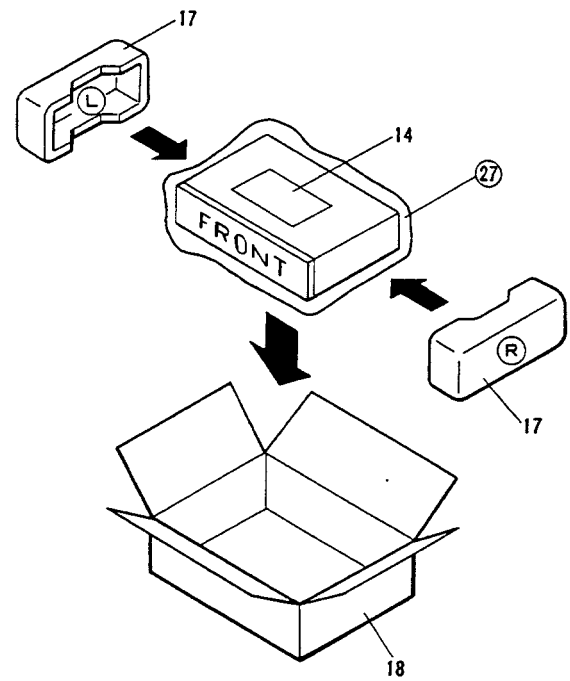
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

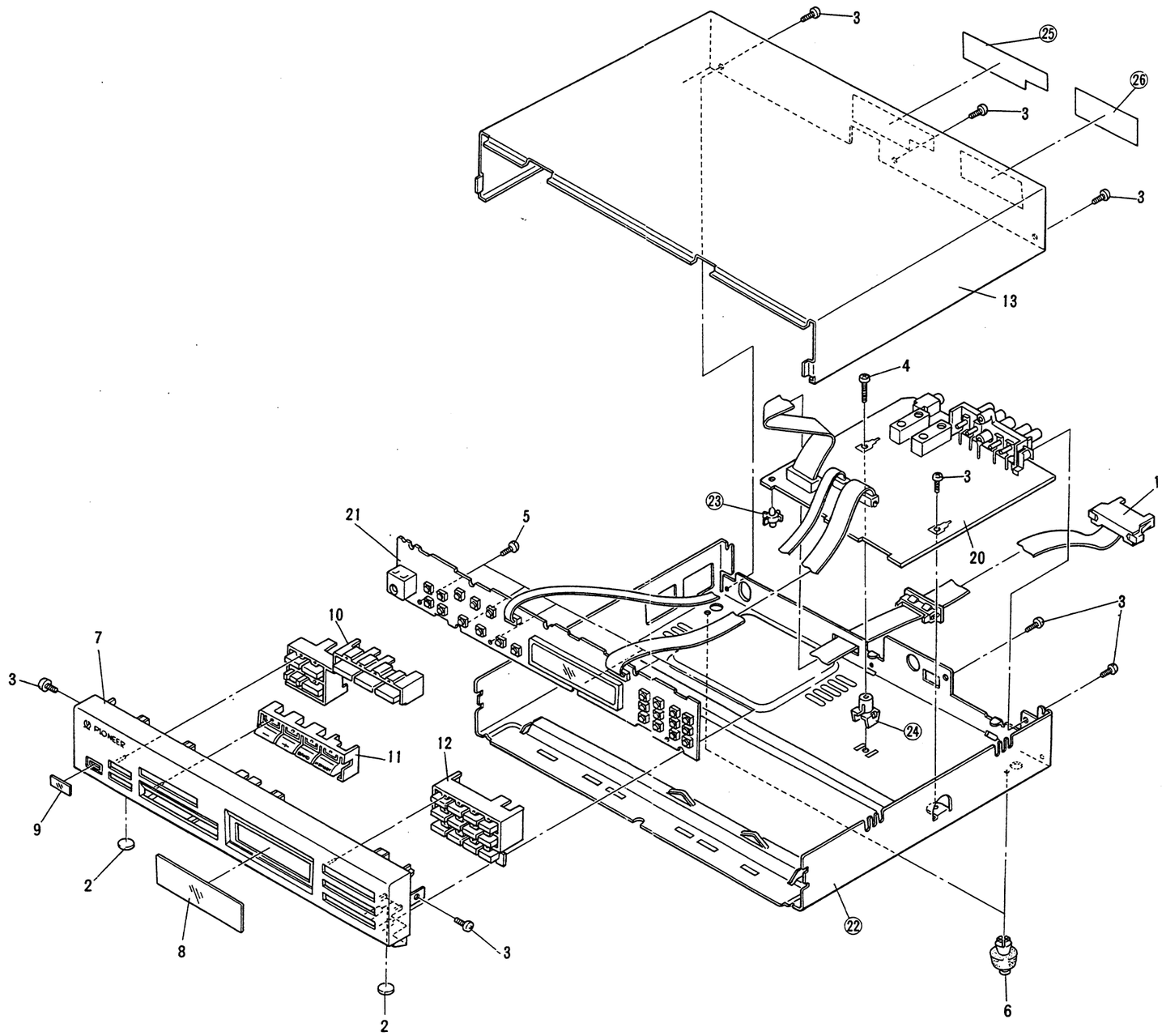
Mark	No.	Part No.	Symbol & Description
	1	ADE1058	CORD WITH PLUG
	2	AEB1012	RUBBER SHEET
	3	ABA-298	SCREW
	4	ABA1018	SCREW
	5	BPZ26P080FMC	SCREW
	6	AEC-847	LEG ASS'Y
	7	AMB1448	FRONT PANEL
	8	AAK1634	TUNER PLATE
	9	AAK1635	REMOTE CONTROL FILTER
	10	AAD1509	WAKE UP BUTTON
	11	AAD1518	BAND BUTTON
	12	AAD1519	STATION CALL BUTTON
	13	ANE1162	BONNET
	14	ARH1047	CAUTION CARD
	15	ADH1005	FM ANTENNA
	16	ATB-113	LOOP ANTENNA
	17	AHA1231	SIDE PAD
	18	AHD1578	PACKING CASE
	19	.....	.....
	20	AWZ2276	TUNER MAIN ASSEMBLY
	21	AWZ2277	TUNER DISPLAY ASSEMBLY
	22		CHASSIS
	23		SPACER
	24		PCB MOLD
	25		NAME PLATE
	26		ANTENNA LABEL
	27		SHEET

The F-Z92L instructions are included in the STEREO DOUBLE CASSETTE TAPE DECK AMP DC-Z72, DC-Z82 and DC-Z92 operating instructions.
The operating instructions part numbers are as follows.

DC-Z72 ..... ARB1154
DC-Z82 ..... ARB1155
DC-Z92 ..... ARB1156



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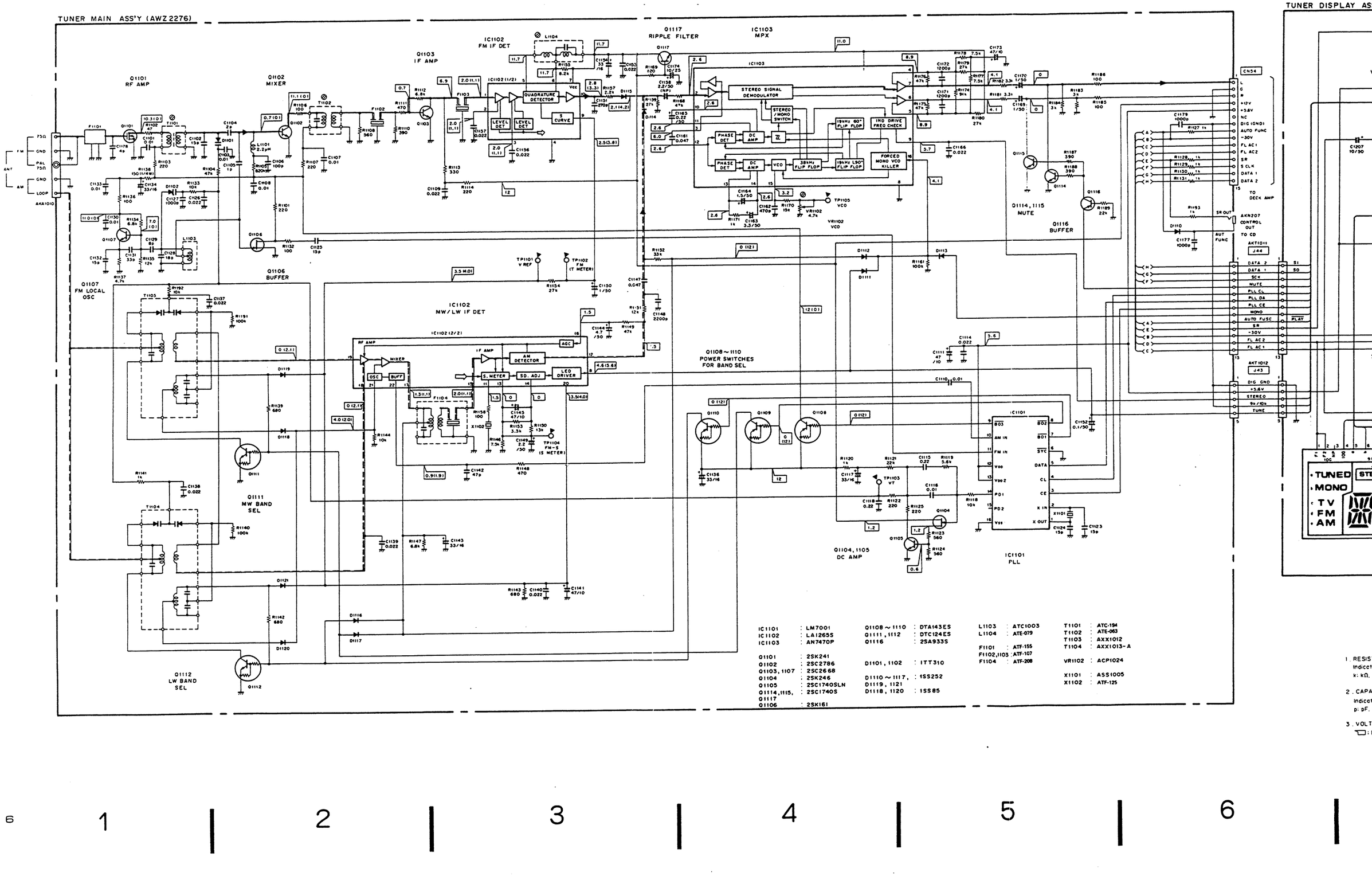
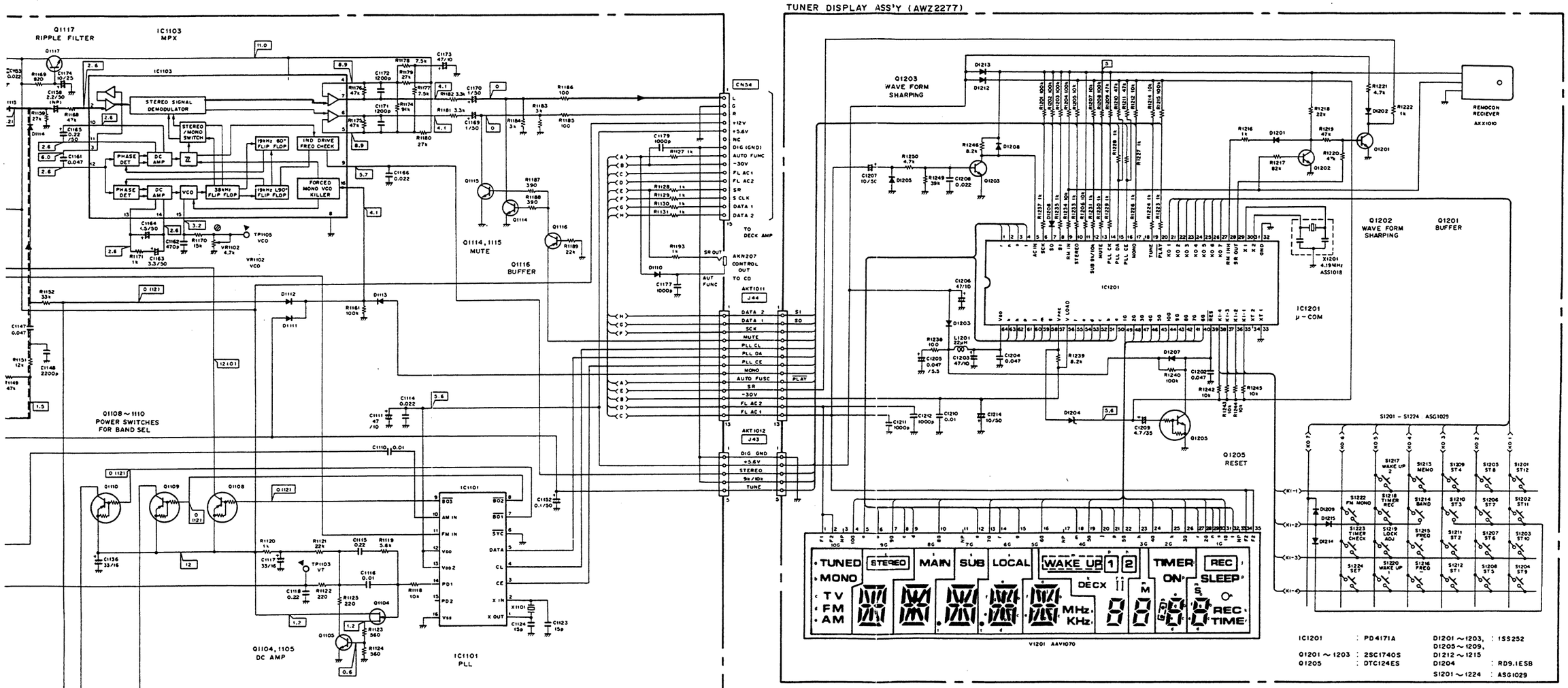
2. SCHEMATIC DIAGRAM





IC1101	: LM7001	Q1108 ~ 1110	: DTA143ES	L1103	: ATC1003	T1101	: ATC-194
IC1102	: LA1265S	Q1111, 1112	: DTC124ES	L1104	: ATE-079	T1102	: ATE-083
IC1103	: AN7470P	Q1116	: 2SA933S			T1103	: AXX1012
				F1101	: ATF-155	T1104	: AXX1013-A
Q1101	: 2SK241			F1102,1103	: ATF-107		
Q1102	: 2SC2786	D1101, 1102	: 1TT310	F1104	: ATF-208	VR1102	: ACP1024
Q1103, 1107	: 2SC2668						
Q1104	: 2SK246	D1110 ~ 1117,	: 1SS252			X1101	: ASS1005
Q1105	: 2SC1740SLN	D1119, 1121				X1102	: ATF-125
Q1114, 1115, Q1117	: 2SC1740S	D1118, 1120	: 1SS85				
Q1106	: 2SK161						

1. RESISTORS:
Indicated in Ω, 1/8W, 1/4W, ±5% tolerance unless otherwise noted
k: kΩ, M: MΩ, (F): ±1%, (G): ±2%,(K): ±10%, (M): ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted
p: pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
▽: DC voltage (V) at no input signal

4. OTHERS:
➡: Signal route.
⊘: Adjusting point.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
■marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

IC1201	: PD4171A	D1201 ~ 1203, D1205 ~ 1209, D1212 ~ 1215	: 1SS252
Q1201 ~ 1203	: 2SC1740S		
Q1205	: DTC124ES	D1204	: RD9.1ESB
		S1201 ~ 1224	: ASG1029

3. P.C. BOARDS CONNECTION DIAGRAM

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

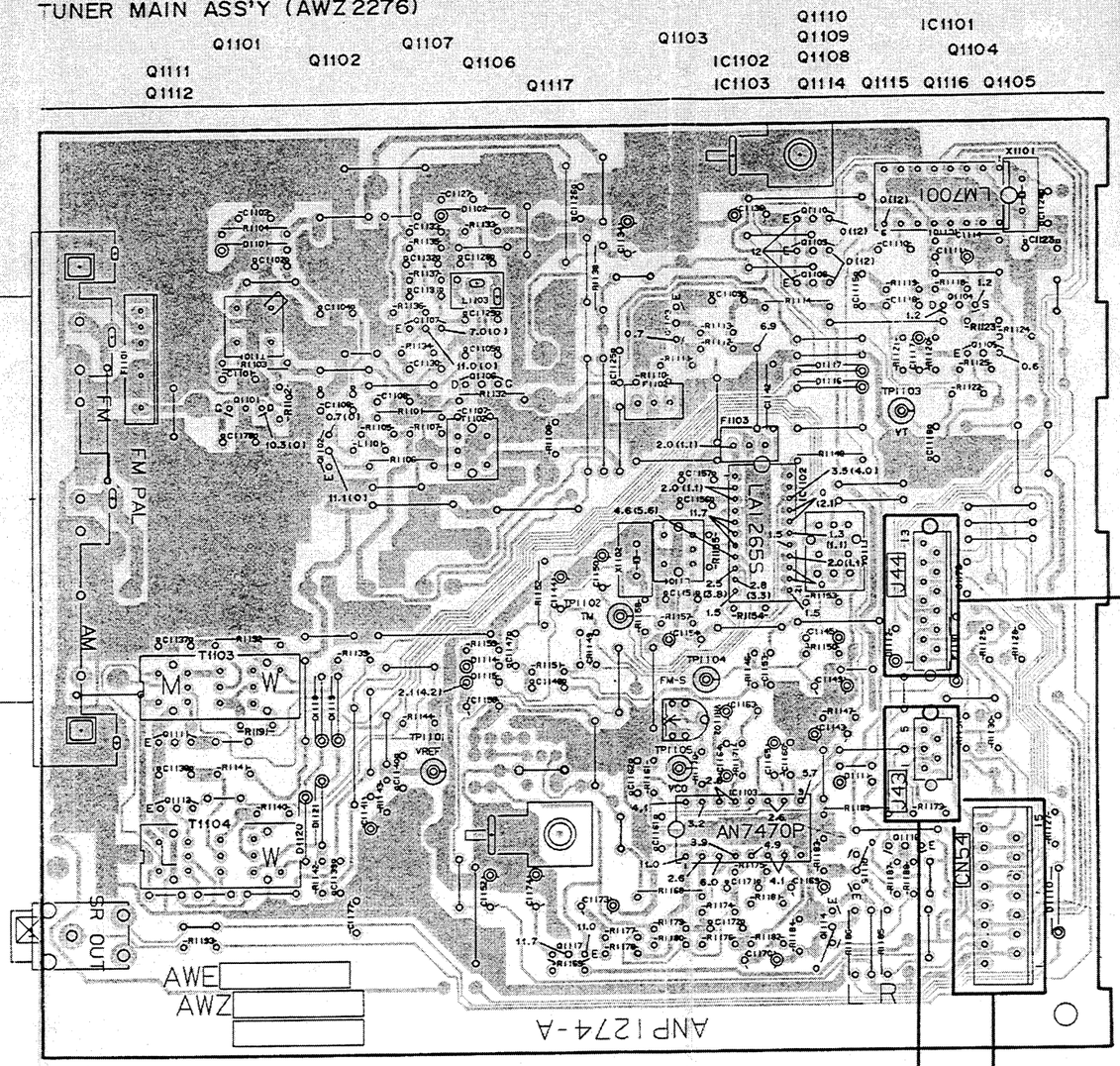
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

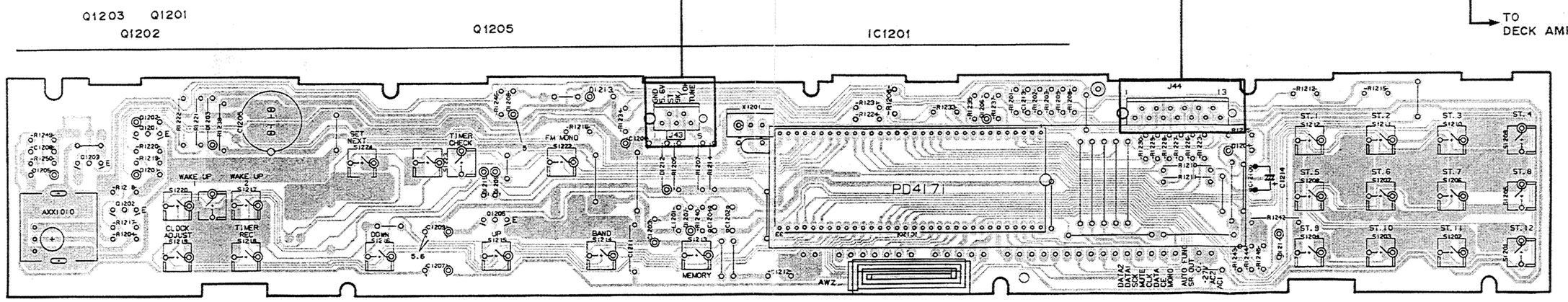
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capactor terminal marked with (double circles) shows negatine termianl.
4. The diode terminal marked with (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

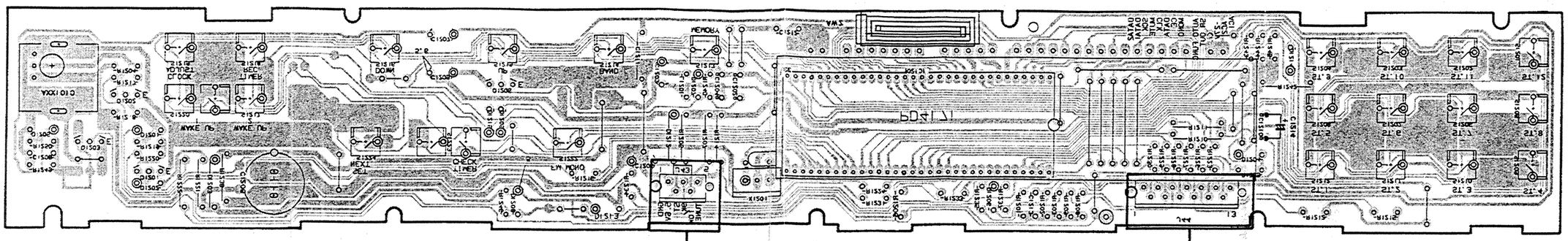
TUNER MAIN ASS'Y (AWZ2276)



TUNER DISPLAY ASS'Y (AWZ2277)

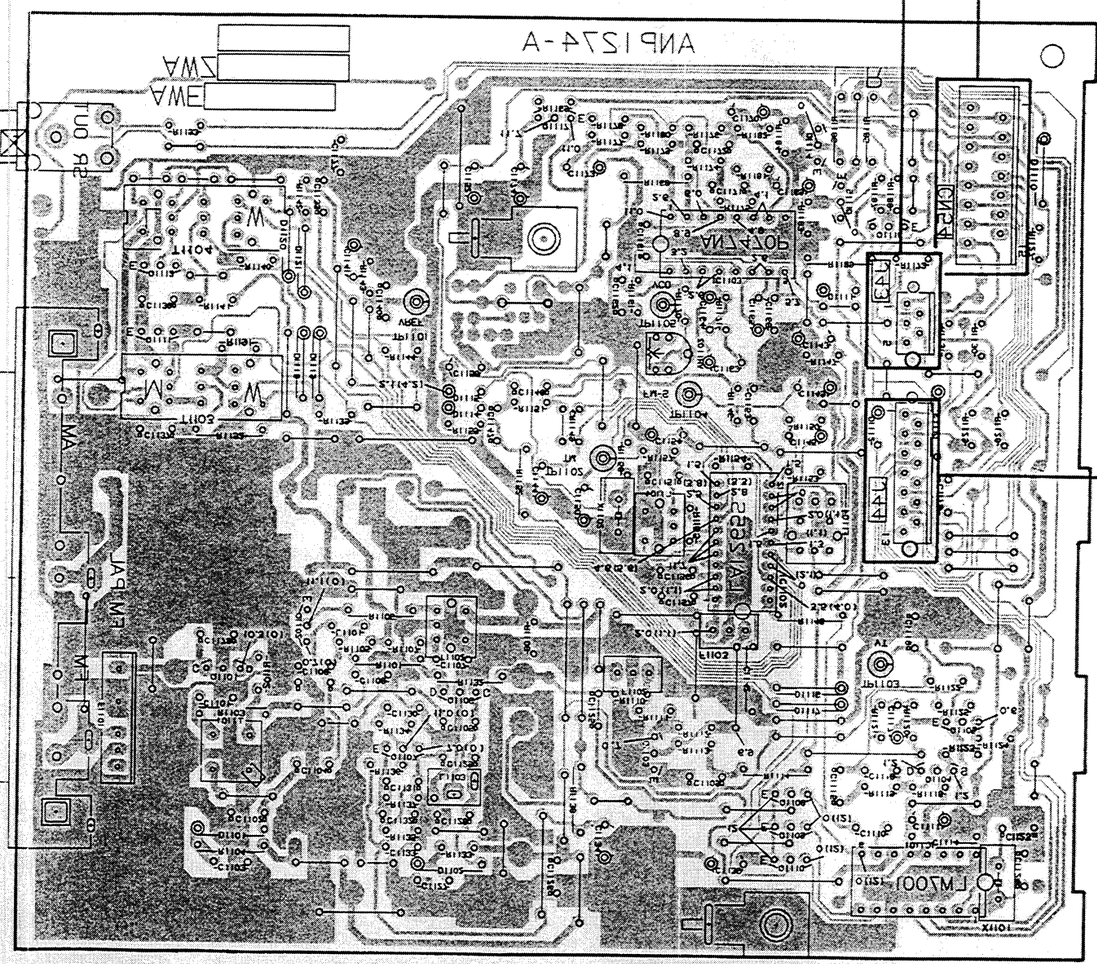


TUNER DISPLAY ASS'Y (AWZ5571)



TO DECK AMP

TUNER MAIN ASS'Y (AWZ5570)



This P.C.B connection diagram is viewed from the foil side.

4. ELECTRICAL PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Miscellaneous

Mark	Symbol & Description	Part No.
	Tuner main assembly	AWZ2276
	Tuner display assembly	AWZ2277

Tuner Main Assembly (AWZ2276)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC1103	AN7470P
	IC1102	LA1265S
	IC1101	LM7001
	Q1108 – Q1110	DTA143ES
	Q1111, Q1112	DTC124ES
	Q1116	2SA933S
	Q1114, Q1115, Q1117	2SC1740S
	Q1105	2SC1740SLN
	Q1103, Q1107	2SC2668
	Q1102	2SC2786
	Q1106	2SK161
	Q1101	2SK241
	Q1104	2SK246
	D1101, D1102	ITT310
	D1110 – D1117, D1119, D1121	1SS252
	D1118, D1120	1SS85

COILS, TRANSFORMER AND FILTERS

Mark	Symbol & Description		Part No.
	L1103	FM coil	ATC1003
	L1104	FM DET. coil	ATE-079
	L1101	Axial inductor	LAU2R2M
	T1101	FM RF transformer	ATC-194
	T1102	FM matching transformer	ATE-063
	F1102, F1103	FM ceramic filter	ATF-107
	F1101	FM B.P.F.	ATF-155
	F1104	AM ceramic filter	ATF-208

CAPACITORS

Mark	Symbol & Description	Part No.
	C1162 (470p/50V)	ACE1039
	C1142 (47p/50V)	ACG1016
	C1106 (100p/50V)	ACG1017
	C1127, C1177, C1179 (1000p/50V)	ACG1020
	C1101, C1103, C1107, C1108, C1110, C1116, C1130, C1133 (0.01/50V)	ACG1021
	C1114, C1153, C1166 (0.022/50V)	ACG1022
	C1105	CCDCH010C50
	C1104	CCDCH020C50
	C1129	CCDCH080D50
	C1132	CCDCH150J50
	C1131	CCDCH330J50
	C1102	CCDRH150J50
	C1151	CCDSL271J50
	C1128	CCDTH180J50
	C1178	CCMCH040C50
	C1123 – C1125	CCMCH150J50
	C1158	CEANP2R2M50
	C1165	CEASR22M50
	C1152	CEAS0R1M50
	C1150, C1169, C1170	CEAS010M50

Mark	Symbol & Description	Part No.
	C1164	CEAS1R5M50
	C1174	CEAS100M25
	C1149	CEAS2R2M50
	C1163	CEA3R3M50
	C1117, C1134, C1136, C1143, C1154	CEAS330M16
	C1144	CEAS4R7M50
	C1111, C1141, C1145, C1173	CEAS470M10
	C1115, C1118	CFTXA224J50
	C1171, C1172	CKCYB122K50
	C1148	CKCYB222K50
	C1147, C1161	CKCYF473Z50
	C1109, C1126, C1137 – C1140, C1156, C1157	CKDYF223Z50

RESISTORS

Mark	Symbol & Description	Part No.
	VR1102 Semi-fixed (4.7k)	ACP1024
	R1138	RD1/4PM151J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	X1101 Crystal resonator (7.2MHz)	ASS1005
	X1102 Ceramic resonator	ATF-125
	4P antenna terminal	AKA1010
	Mini Jack	AKN-207
	AM RF tuning block	AXX1012
	AM RF tuning block	AXX1013

Tuner Display Assembly (AWZ2277)

Mark	Symbol & Description	Part No.
	IC1201	PD4171-A
	Q1205	DTC124ES
	Q1201 – Q1203	2SC1740S
	D1204	RD9.1ESB
	D1201 – D1203, D1205 – D1209, D1212 – D1215	1SS252

SWITCH

Mark	Symbol & Description	Part No.
	S1201 – S1220, S1222 – S1224 Tact switch (WAKE-UP, ADJ, REC, SET, CHECK, FM MONO, TUNING +, TUNING –, BAND, MEMORY, STATION CALL)	ASG1029

COIL

Mark	Symbol & Description	Part No.
	L1201 Axial inductor	LAU220K

CAPACITORS

Mark	Symbol & Description	Part No.
	C1211, C1212 (1000p/50V)	ACG1020
	C1208 (0.022/50V)	ACG1022
	C1205 (0.047F/5.5V)	ACH1070
	C1207	CEJA100M50
	C1209	CEJA4R7M35
	C1203, C1206	CEJA470M10
	C1202, C1204,	CKDYX473M25
	C1210	CKDYX103Z50
	C1214	CEAS100M50

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	X1201 Ceramic Resonator (4.19MHz)	ASS1018
	V1201 Fluorescent Tube	AAV1070
	Remote Control Reception	AXX1010

5. ADJUSTMENT

- For connections and points to be adjusted, refer to Fig. 5-1 and Fig. 5-2.
- Where an asterisk (*) is given for "level dBμ," set to the level (dBμ) at which the voltage is roughly half the voltage between TP1104 and GND at 60dB.
- There are no adjustment items for the AM tuner section (MW, LW).

5.1 FM TUNER SECTION ADJUSTMENT

- Set the BAND selector to "FM".
- Perform VCO adjustment two minutes or more after turning the power ON.

Note: Stereo modulation: Main 1kHz L + R ±68.25Hz dev.
Pilot 19kHz ±6.75kHz dev.

Step No.	Adjustment Title	FM SG (1kHz ± 75kHz dev.)		F-Z92L Reception Frequency Display	Adjustment	
		Frequency (MHz)	Level (dBμ)		Adjustment Location	Specifications
1	FM local oscillator control voltage check	No signal	—	87.5MHz	—	Confirm that DC voltage between TP1103 and GND is 3.4 ± 1.5V.
				108MHz	—	Confirm that the DC voltage between TP1103 and GND is 8.7 $^{+1.8}_{-2}$ V.
2	Adjustment to improve sensitivity	98.0	*	98.0MHz	T1101, T1102	Adjust so that the DC voltage between TP1104 and GND is maximum.
3	Detector coil T-meter adjustment	98.0	60	98.0MHz	L1104	Adjust so that the DC voltage between TP1101 and TP1102 is 0 V.
4	VCO adjustment	98.0 (No modulation)	60	98.0MHz	VR1102	Adjust so that the frequency between TP1105 and GND is 76 ± 0.1 kHz.
5	MPX distortion adjustment	98.0	60	98.0MHz	T1102	Minimize distortion in both left and right channel outputs (adjust T1102 to with in ±90°).
		Stereo modulation (Note)				

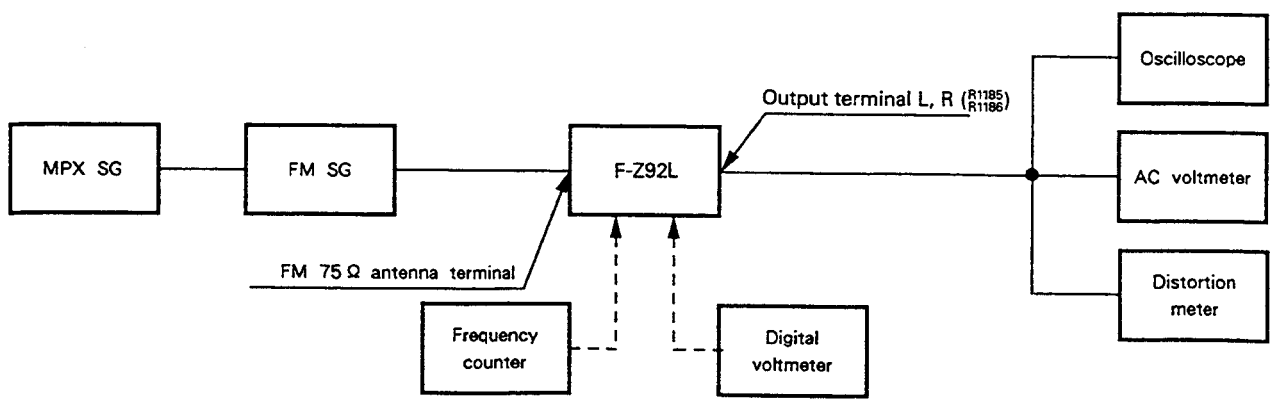


Fig. 5-1 FM adjustment wiring diagram

5. RÉGLAGE

- Les raccordements et les points de réglages sont représentés à la Fig. 5-1 et Fig. 5-2.
- Lorsqu'un astérisque accompagne un "niveau dBμ", régler à un niveau (dBμ) tel que la tension soit à peu près la moitié de celle qui est présente entre TP1104 et GND pour 60 dB.
- Il n'y a pas d'élément de réglage pour la section de tuner AM.

5.1 Réglage du syntoniseur FM

- Placer le sélecteur BAND sur la positioon "FM".
- Régler le VCO après deux minutes (ou plus) de mise sous tension.

Note: Modulation stéréo: Principal 1kHz L + R ±68,25Hz dév.
Pilote 19kHz ±6,75kHz dév.

Etape N°	Items de réglage	FM SG (1kHz ± 75kHz dév.)		F-Z92L Affichage de fréquence de réception	Réglage	
		Fréquence (MHz)	Niveau (dBμ)		Lieu de réglage	Caractéristiques
1	Vérification de la tension de commande de l'oscillateur local FM	Aucun signal	–	87,5MHz	–	Vérifier que la tension entre TP1103 et GND est égale à 3,4V ± 1,5V.
				108MHz	–	Vérifier que la tension continue entre TP1103 et GND est égale à 8,7V $^{+1,8}_{-2}$ V.
2	Réglage destiné à améliorer la sensibilité	98,0	*	98,0MHz	T1101, T1102	Régler de manière que la tension continue entre TP1104 et GND soit maximale.
3	Réglage de la bobine de détection	98,0	60	98,0MHz	L1104	Régler de manière que la tension continue entre TP1101 et TP1102 soit nulle.
4	Réglage du VCO	98,0 (sans modulation)	60	98,0MHz	VR1102	Régler de manière que la fréquence entre TP1105 et GND soit égale à 76 ± 0,1 kHz.
5	Réglage de distorsion MPX	98,0	60	98,0MHz	T1102	Réduire la distorsion dans les sorties des deux canaux droit et gauche (régler T1102 à ±90°).
		Modulation stéréo (Note)				

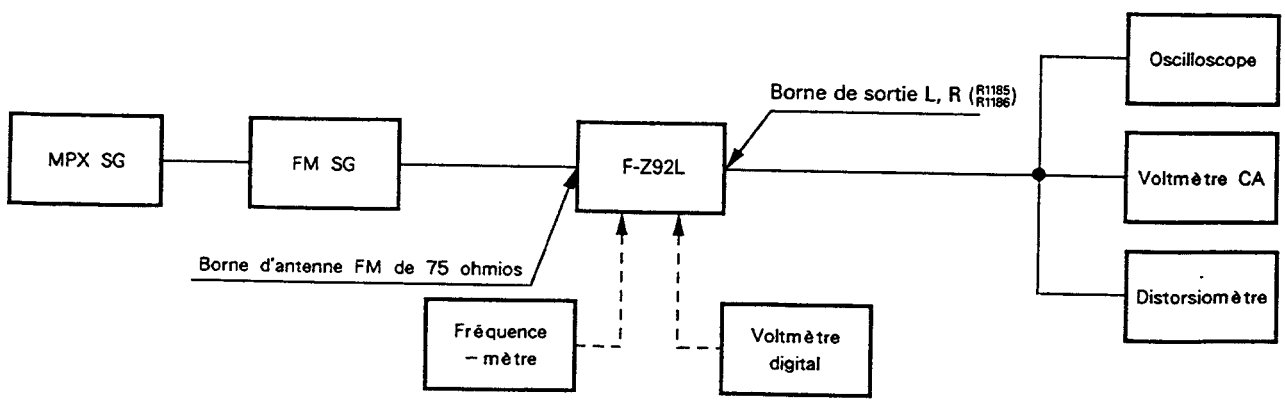


Fig. 5-1 Diagramme de câblage de réglage FM

5. AJUSTE

- Para las conexiones y puntos de ajuste, refiérase a la Fig. 5-1 y Fig. 5-2.
- Donde un asterisco (*) represente el "nivel dBμ", ajuste al nivel (dBμ) en el que la tensión sea aproximadamente la mitad de la tensión entre TP1104 y GND a 60 dB.
- Para la sección del sintonizador de AM no existen ajustes.

5.1 Ajuste de la sección del sintonizador de FM

- Ajuste el selector BAND a la posición "FM".
- Realice el ajuste VCO dos minutos o más después de conectar la alimentación.

Nota: Modulación estereo: Principal 1kHz L + R ±68,25Hz dev.
Pilote 19kHz ±6,75kHz dev.

N°. de paso	Items de ajuste	FM SG (1kHz ± 75kHz dev.)		F-Z92L Frecuencímetro de de recepción	Ajuste	
		Frequencia (MHz)	Nivel (dBμ)		Lugar de ajuste	Especificaciones
1	Comprobación de la tensión de control del oscilador local de FM	Ninguna señal	—	87,5MHz	—	Comproebe que la tensión de CC entre TP1103 y GND sea de 3,4 ± 1,5V.
				108MHz	—	Compruebe que la tensión de CC entre TP1103 y GND sea de 8,7V $^{+1,8}_{-2}$ V.
2	Ajuste para mejorar la sensibilidad	98,0	*	98,0MHz	T1101, T1102	Ajuste de manera que la tensión de CC entre TP1104 y GND sea la máxima.
3	Ajuste del medidor T de la bobina detectora	98,0	60	98,0MHz	L1104	Ajuste de manera que la tensión de CC entre TP1101 y TP1102 sea de 0V.
4	Ajuste VCO	98,0 (Sin modulación)	60	98,0MHz	VR1102	Ajuste de manera que la frequencia entre TP1105 y GND sea de 76 ± 0,1 kHz.
5	Ajuste de la distorsión de MPX	98,0	60	98,0MHz	T1102	Reduzca la distorsión tanto en la salida del canal izquierdo como en la del derecho (ajuste T1102 a dentro de ±90°).
		Modulación estereo (Nota)				

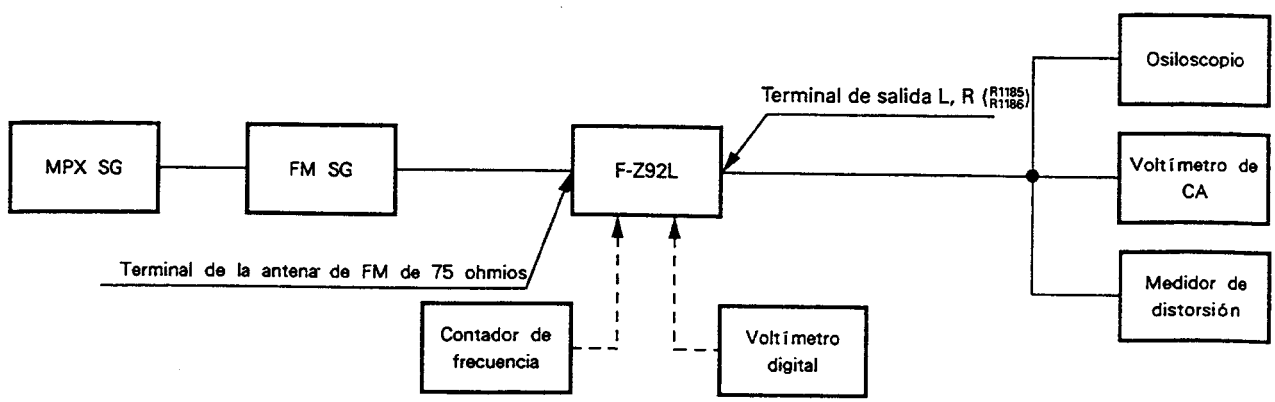


Fig. 5-1 Diagramma de conexión de ajuste de FM

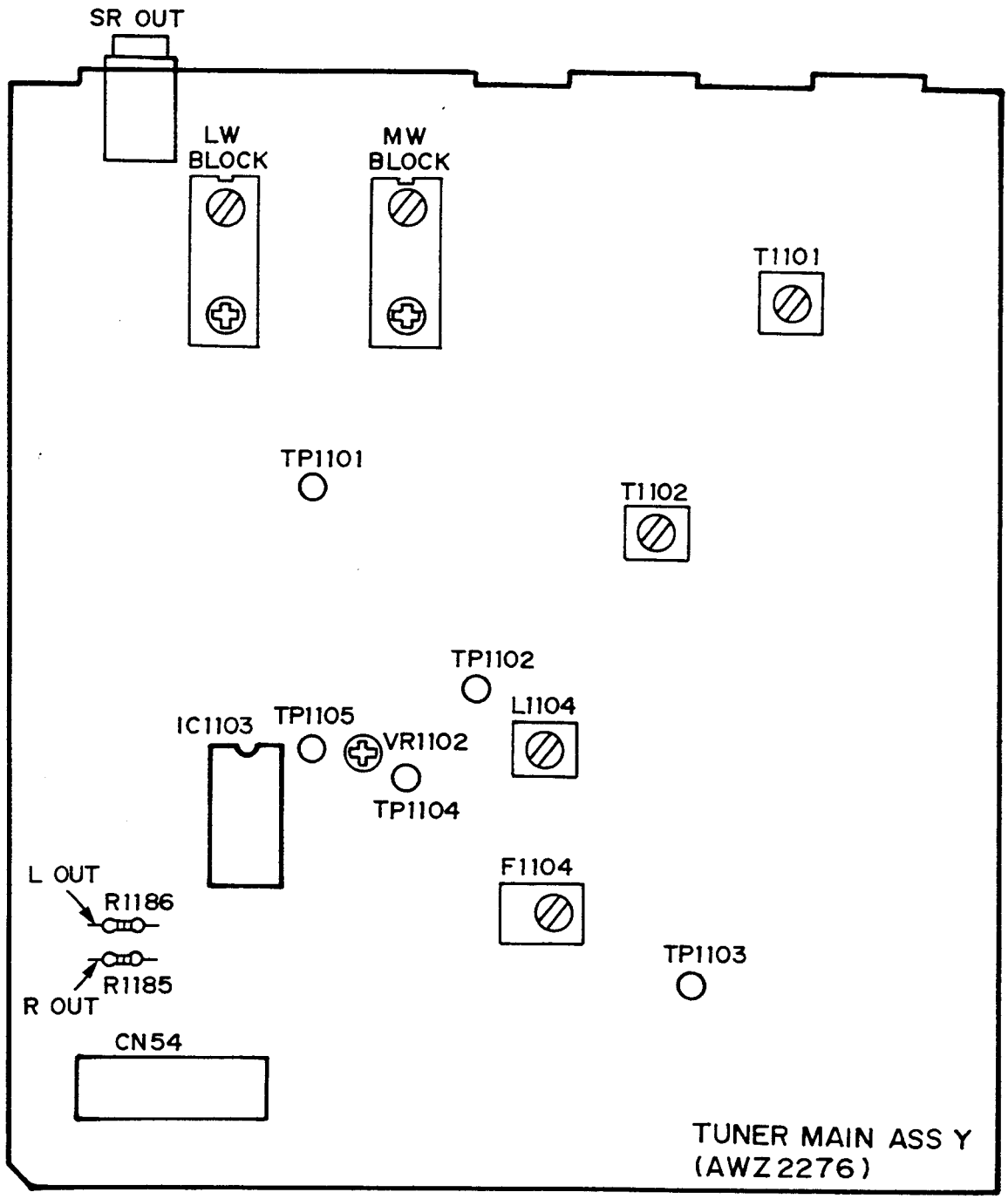


Fig. 5-2 Adjustment points
Fig. 5-2 Points de réglage
Fig. 5-2 Puntos de ajuste

6. IC INFORMATION

Notes I : CMOS input
O : CMOS output
DP: P-channel open drain output with pull-down resistance

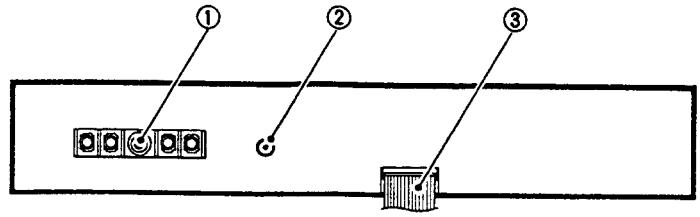
• PD4171 (tuner section and system control microprocessor) pin functions

No.	Name	I/O	Functions		Active
1	r	DP	Segment P	Fluorescent display segment control output	L
2	n	DP	Segment N		
3	s	DP	Segment S		
4	t	DP	Segment T		
5	AC IN	I	AC pulse input (enters backup mode with no input)		H/L
6	SCK	I	Serial clock input		H/L
7	SO	O	Serial data output		H/L
8	SI	I	Serial data input		H/L
9	REM	I	SR or REMOTE CONTROL signal input		H/L
10	STEREO	I	STEREO IND ON/OFF decision input L: lights STEREO IND		L
11	—	I	Not used (pull up)		L
12	SUB 9k/10k	I	Selects steps for reception frequency of tuner section "L" · · · AM 9kHz, FM 50kHz "H" · · · AM 10kHz, FM 100kHz		L
13	MUTE	O	MUTE output Turns on MUTE for 0.8 sec. during BAND switching, frequency UP/DOWN, STATION switching, and MPX switching (H: MUTE ON)		H
14	PLL CLK	O	PLL clock output	IC1101 (LM7001) control signal output	
15	PLL DATA	O	PLL data output		H/L
16	PLL ST	O	PLL strobe output		H
17	MONO	O	Control output for selecting MONO H: MONO		H
18	LOCAL	O	Not used (open)		L
19	TUNE	I	TUNED IND ON/OFF decision input "L" (when 1.5V or less): TUNED IND lights		L
20	$\overline{\text{PLAY}}$	I	CD PLAY decision signal input When CD switches to PLAY and "L" is input to this pin, the AMP section function switches to "CD." (When L: CD PLAY)		L
21 I 27	KO1 I KO7	O	Key scan output		L
28	REM INH	O	Control output to cut the signal from the remote control photoreceptor. The signal is not output from the remote control photoreceptor during SR signal output to the CD and graphic EQ. SR signal output conditions. o During CD control when ASES (Automatic Sync Editing System) operation, timer start and AMP functions are being used for other than CD (CD stopped). o During timer startup and when the graphic EQ memory is set to "B." o During sleep timer operation and when the graphic EQ memory is set to "A."		L
29	SR OUT	O	SR signal output		H/L
30	X1	—	Connects a 4.19MHz ceramic resonator between pins.		—
31	X2	—			

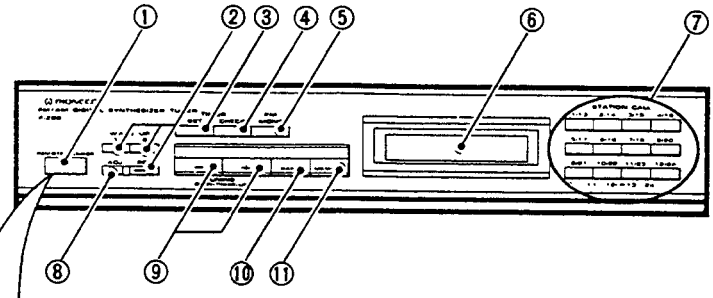
No.	Name	I/O	Functions		Active
32	VSS	GND	GND		—
33	XT1	—	GND		—
34	XT2	—	NC		—
35 I 38	KI1 I KI4	I	Key scan input		L
39	$\overline{\text{RESET}}$	I	Reset input		L
40 I 44	6G I 10G	DP	Grid 6 I Grid 10	Fluorescent display grid control output	H
45	5G	DP	Grid 5	Fluorescent display grid control output	H
46	4G	DP	Grid 4		
47	3G	DP	Grid 3		
48	2G	DP	Grid 2		
49	1G	DP	Grid 1		
50	a	DP	Segment K	Fluorescent display segment control output	H
51	b	DP	Segment H		
52	c	DP	Segment P		
53	d	DP	Segment J		
54	e	DP	Segment M		
55	f	DP	Segment G		
56	VLOAD	—	−32V fluorescent display controller/driver power supply		—
57	VPRE	—	−4.1V fluorescent display controller/driver power supply There is danger of damage at −7V or less (typical −10V).		—
58	g	DP	Segment F	Fluorescent display segment control output	H
59	m	DP	Segment E		
60	j	DP	Segment D		
61	p	DP	Segment C		
62	h	DP	Segment B		
63	k	DP	Segment A		
64	VDD	—	+5V power supply		—

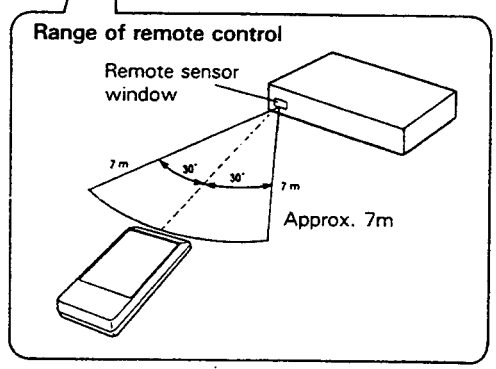
7. PANEL FACILITIES

F-Z92/F-Z92L



F-Z92/F-Z92L





① FM/AM ANTENNA terminals

Antennas must be connected to these terminals; otherwise you will not be able to receive stations. See page 7 for details on ANTENNA CONNECTIONS.

② CONTROL OUT jack

Connect this jack to the CONTROL IN jack of a CD player (PD-Z72T or PD-Z82M).

- This jack enables the remote control unit provided with the cassette tape deck amplifier to control the CD player.
  Also, by connecting this to the CONTROL IN jack of the optional CD player PD-Z72T or PD-Z82M, it is possible to enjoy synchronized recording of compact discs on the cassette deck (Auto Synchro Editing System: ASES).

③ TUNER input/output cord

Connect to the TUNER jack of the cassette tape deck amplifier.

① REMOTE SENSOR window

② Timer selector switches

[WAKE UP 1,2]
Use for timer playback setting.
[REC]
Use for timer recording setting.

③ SET switch

Use for current time, timer playback, and timer recording setting.

④ CHECK switch

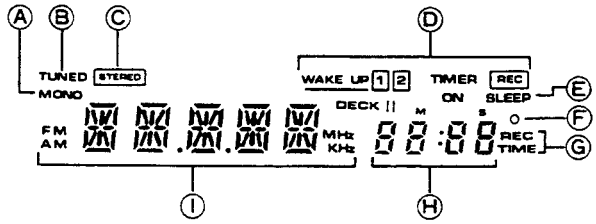
After setting the unit for timer playback or timer recording, use this switch to confirm that the settings are as intended.

⑤ FM MONO

Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

⑥ Display section

Shows current time, received frequency, contents of timer settings, etc.



Ⓐ MONO indicator

Lights when the FM MONO switch is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

Ⓑ TUNED indicator

Lights when a broadcast is received.

Ⓒ STEREO indicator

Lights when an FM stereo broadcast is received when the FM MONO switch is set to OFF.

Ⓓ Timer indicators

These show which timers have been set.

Ⓔ SLEEP indicator

Indicates that the sleep timer is operating.

Ⓕ Remote control indicator

Flashes when a command is received from the remote control unit.

Ⓖ Deck REC TIME indicator

Lights when deck is recording.

Ⓗ Time display

Usually this shows the present time. When recording, it shows the elapsed time since recording began.

Ⓘ Frequency display

Shows received broadcast frequency. Also gives scrolling display of main function status.

⑦ STATION CALL switches

These are used to recall memorized stations and to memorize stations.

⑧ ADJ switch

Used for setting the current time.

⑨ –, + switches

[During tuning]

These are used to locate the stations.

The "–" switch to go to a lower, and the "+" switch to go to a higher frequency.

[During time and timer setting]

Used for decreasing "–" or increasing "+" the values when setting the time or timer.

⑩ BAND selector switch

[For model F-Z92]

Each time this switch is pressed, FM or AM reception is selected alternately.

FM and MHz light: FM reception

AM and kHz light: AM reception

[For model F-Z92L]

Each time this switch is pressed, FM, MW or LW reception is selected alternately.

FM and MHz light: FM reception

AM and kHz light: MW or LW reception

⑪ MEMORY switch

This switch is used to memorize stations. When the switch is pressed, the frequency display will flash. To memorize the frequency of any station, press the station call switch while the frequency display flashes.

8. SPECIFICATIONS

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... Mono: 12.5 dBf, IHF (1.2 μV/75 ohms)
Sensitivity (DIN) ..... Mono S/N 26 dB: 0.9 μV/75 ohms
Stereo S/N 46 dB: 50 μV/75 ohms
Signal-to-Noise Ratio (IHF, 85 dBf Input) ..... Mono: 77 dB
Signal-to-Noise Ratio (DIN) ..... Mono: 66 dB
Stereo: 60 dB
Distortion ..... Stereo: 0.5% (1kHz)
Antenna Input ..... 75 ohms unbalanced

MW (AM) Tuner Section

Frequency range
When 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) ..... 350 μV/m
Antenna ..... Loop Antenna
Output Level (AM 30% MOD) ..... 150 mV

LW Tuner Section

(For LW-equipped models only)

Frequency range ..... 153 kHz to 281 kHz
Sensitivity (IHF, Loop antenna) ..... 1500 μV/m
Antenna ..... Loop Antenna
Output Level (AM 30% MOD) ..... 150 mV

Miscellaneous

Dimensions ..... 360 (W) x 63 (H) x 315 (D) mm
14-3/16 (W) x 2-1/2 (H) x 12-3/8 (D) in
Weight (without package) ..... 2.2 kg (4 lb. 14 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1